

# Kevin Wiehe

## List of Publications by Year in descending order

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Version: 2024-02-01

59  
papers

5,265  
citations

136950

32  
h-index

149698

56  
g-index

72  
all docs

72  
docs citations

72  
times ranked

6030  
citing authors

#	ARTICLE	IF	CITATIONS
1	Co-evolution of a broadly neutralizing HIV-1 antibody and founder virus. <i>Nature</i> , 2013, 496, 469-476.	27.8	961
2	Vaccine Induction of Antibodies against a Structurally Heterogeneous Site of Immune Pressure within HIV-1 Envelope Protein Variable Regions 1 and 2. <i>Immunity</i> , 2013, 38, 176-186.	14.3	374
3	Effect of natural mutations of SARS-CoV-2 on spike structure, conformation, and antigenicity. <i>Science</i> , 2021, 373, .	12.6	318
4	Maturation Pathway from Germline to Broad HIV-1 Neutralizer of a CD4-Mimic Antibody. <i>Cell</i> , 2016, 165, 449-463.	28.9	305
5	InÂvitro and inÂvivo functions of SARS-CoV-2 infection-enhancing and neutralizing antibodies. <i>Cell</i> , 2021, 184, 4203-4219.e32.	28.9	228
6	Staged induction of HIV-1 glycanâ€“dependent broadly neutralizing antibodies. <i>Science Translational Medicine</i> , 2017, 9, .	12.4	212
7	Neutralizing antibody vaccine for pandemic and pre-emergent coronaviruses. <i>Nature</i> , 2021, 594, 553-559.	27.8	199
8	Diversion of HIV-1 vaccineâ€“induced immunity by gp41-microbiota cross-reactive antibodies. <i>Science</i> , 2015, 349, aab1253.	12.6	191
9	Antibody-Dependent Cellular Phagocytosis in Antiviral Immune Responses. <i>Frontiers in Immunology</i> , 2019, 10, 332.	4.8	156
10	Polyreactivity and Autoreactivity among HIV-1 Antibodies. <i>Journal of Virology</i> , 2015, 89, 784-798.	3.4	154
11	Structural diversity of the SARS-CoV-2 Omicron spike. <i>Molecular Cell</i> , 2022, 82, 2050-2068.e6.	9.7	125
12	Potent and broad HIV-neutralizing antibodies in memory B cells and plasma. <i>Science Immunology</i> , 2017, 2, .	11.9	119
13	Targeted selection of HIV-specific antibody mutations by engineering B cell maturation. <i>Science</i> , 2019, 366, .	12.6	118
14	HIV-1 Envelope gp41 Antibodies Can Originate from Terminal Ileum B Cells that Share Cross-Reactivity with Commensal Bacteria. <i>Cell Host and Microbe</i> , 2014, 16, 215-226.	11.0	105
15	Reconstructing a B-Cell Clonal Lineage. II. Mutation, Selection, and Affinity Maturation. <i>Frontiers in Immunology</i> , 2014, 5, 170.	4.8	104
16	Functional Relevance of Improbable Antibody Mutations for HIV Broadly Neutralizing Antibody Development. <i>Cell Host and Microbe</i> , 2018, 23, 759-765.e6.	11.0	98
17	An autoreactive antibody from an SLE/HIV-1 individual broadly neutralizes HIV-1. <i>Journal of Clinical Investigation</i> , 2014, 124, 1835-1843.	8.2	93
18	A broadly cross-reactive antibody neutralizes and protects against sarbecovirus challenge in mice. <i>Science Translational Medicine</i> , 2022, 14, eabj7125.	12.4	93

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19	Antibody Feedback Limits the Expansion of B Cell Responses to Malaria Vaccination but Drives Diversification of the Humoral Response. <i>Cell Host and Microbe</i> , 2020, 28, 572-585.e7.	11.0	87
20	Initiation of immune tolerance-controlled HIV gp41 neutralizing B cell lineages. <i>Science Translational Medicine</i> , 2016, 8, 336ra62.	12.4	86
21	Mimicry of an HIV broadly neutralizing antibody epitope with a synthetic glycopeptide. <i>Science Translational Medicine</i> , 2017, 9, .	12.4	81
22	Initiation of HIV neutralizing B cell lineages with sequential envelope immunizations. <i>Nature Communications</i> , 2017, 8, 1732.	12.8	76
23	Cryo-EM structures of SARS-CoV-2 Omicron BA.2 spike. <i>Cell Reports</i> , 2022, 39, 111009.	6.4	74
24	Vaccine Elicitation of High Mannose-Dependent Neutralizing Antibodies against the V3-Glycan Broadly Neutralizing Epitope in Nonhuman Primates. <i>Cell Reports</i> , 2017, 18, 2175-2188.	6.4	69
25	Antibody Light-Chain-Restricted Recognition of the Site of Immune Pressure in the RV144 HIV-1 Vaccine Trial Is Phylogenetically Conserved. <i>Immunity</i> , 2014, 41, 909-918.	14.3	65
26	Inference of the HIV-1 VRC01 Antibody Lineage Unmutated Common Ancestor Reveals Alternative Pathways to Overcome a Key Glycan Barrier. <i>Immunity</i> , 2018, 49, 1162-1174.e8.	14.3	61
27	Fab-dimerized glycan-reactive antibodies are a structural category of natural antibodies. <i>Cell</i> , 2021, 184, 2955-2972.e25.	28.9	57
28	Neutralization-guided design of HIV-1 envelope trimers with high affinity for the unmutated common ancestor of CH235 lineage CD4bs broadly neutralizing antibodies. <i>PLoS Pathogens</i> , 2019, 15, e1008026.	4.7	56
29	Recapitulation of HIV-1 Env-antibody coevolution in macaques leading to neutralization breadth. <i>Science</i> , 2021, 371, .	12.6	49
30	Disruption of the HIV-1 Envelope allosteric network blocks CD4-induced rearrangements. <i>Nature Communications</i> , 2020, 11, 520.	12.8	42
31	Boosting of HIV envelope CD4 binding site antibodies with long variable heavy third complementarity determining region in the randomized double blind RV305 HIV-1 vaccine trial. <i>PLoS Pathogens</i> , 2017, 13, e1006182.	4.7	38
32	IGHV1-69 B Cell Chronic Lymphocytic Leukemia Antibodies Cross-React with HIV-1 and Hepatitis C Virus Antigens as Well as Intestinal Commensal Bacteria. <i>PLoS ONE</i> , 2014, 9, e90725.	2.5	37
33	Selection of immunoglobulin elbow region mutations impacts interdomain conformational flexibility in HIV-1 broadly neutralizing antibodies. <i>Nature Communications</i> , 2019, 10, 654.	12.8	34
34	HIV envelope V3 region mimic embodies key features of a broadly neutralizing antibody lineage epitope. <i>Nature Communications</i> , 2018, 9, 1111.	12.8	30
35	Immune checkpoint modulation enhances HIV-1 antibody induction. <i>Nature Communications</i> , 2020, 11, 948.	12.8	27
36	Maternal Broadly Neutralizing Antibodies Can Select for Neutralization-Resistant, Infant-Transmitted/Founder HIV Variants. <i>MBio</i> , 2020, 11, .	4.1	25

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37	V2-Directed Vaccine-like Antibodies from HIV-1 Infection Identify an Additional K169-Binding Light Chain Motif with Broad ADCC Activity. <i>Cell Reports</i> , 2018, 25, 3123-3135.e6.	6.4	23
38	mRNA-encoded HIV-1 Env trimer ferritin nanoparticles induce monoclonal antibodies that neutralize heterologous HIV-1 isolates in mice. <i>Cell Reports</i> , 2022, 38, 110514.	6.4	23
39	Boosting with AIDS VAX B/E Enhances Env Constant Region 1 and 2 Antibody-Dependent Cellular Cytotoxicity Breadth and Potency. <i>Journal of Virology</i> , 2020, 94, .	3.4	19
40	Strategies for induction of HIV-1 envelope-reactive broadly neutralizing antibodies. <i>Journal of the International AIDS Society</i> , 2021, 24, e25831.	3.0	19
41	HIV-1 Consensus Envelope-Induced Broadly Binding Antibodies. <i>AIDS Research and Human Retroviruses</i> , 2017, 33, 859-868.	1.1	18
42	HIV vaccine delayed boosting increases Env variable region 2-specific antibody effector functions. <i>JCI Insight</i> , 2020, 5, .	5.0	18
43	Genetic and structural analyses of affinity maturation in the humoral response to HIV-1. <i>Immunological Reviews</i> , 2017, 275, 129-144.	6.0	17
44	Mouse and human antibodies bind HLA-E-leader peptide complexes and enhance NK cell cytotoxicity. <i>Communications Biology</i> , 2022, 5, 271.	4.4	14
45	Structural analysis of the unmutated ancestor of the HIV-1 envelope V2 region antibody CH58 isolated from an RV144 vaccine efficacy trial vaccinee. <i>EBioMedicine</i> , 2015, 2, 713-722.	6.1	13
46	Functional Homology for Antibody-Dependent Phagocytosis Across Humans and Rhesus Macaques. <i>Frontiers in Immunology</i> , 2021, 12, 678511.	4.8	11
47	Rapid selection of HIV envelopes that bind to neutralizing antibody B cell lineage members with functional improbable mutations. <i>Cell Reports</i> , 2021, 36, 109561.	6.4	9
48	Long-Term Recovery of the Adaptive Immune System in Rhesus Macaques After Total Body Irradiation. <i>Advances in Radiation Oncology</i> , 2021, 6, 100677.	1.2	9
49	Reversion and T Cell Escape Mutations Compensate the Fitness Loss of a CD8+ T Cell Escape Mutant in Their Cognate Transmitted/Founder Virus. <i>PLoS ONE</i> , 2014, 9, e102734.	2.5	8
50	Immunodominance of Antibody Recognition of the HIV Envelope V2 Region in Ig-Humanized Mice. <i>Journal of Immunology</i> , 2017, 198, 1047-1055.	0.8	7
51	HLA class II-Restricted CD8+ T cells in HIV-1 Virus Controllers. <i>Scientific Reports</i> , 2019, 9, 10165.	3.3	7
52	Somatic hypermutation to counter a globally rare viral immunotype drove off-track antibodies in the CAP256-VRC26 HIV-1 V2-directed bNAbs lineage. <i>PLoS Pathogens</i> , 2019, 15, e1008005.	4.7	6
53	Cross-Linking of a CD4-Mimetic Miniprotein with HIV-1 Env gp140 Alters Kinetics and Specificities of Antibody Responses against HIV-1 Env in Macaques. <i>Journal of Virology</i> , 2017, 91, .	3.4	5
54	Development of Neutralization Breadth against Diverse HIV-1 by Increasing Ab-Ag Interface on V2. <i>Advanced Science</i> , 2022, , 2200063.	11.2	3

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55	Structural and genetic convergence of HIV-1 neutralizing antibodies in vaccinated non-human primates. PLoS Pathogens, 2021, 17, e1009624.	4.7	2
56	⌘⌘⌘Rapid Selection of HIV Envelopes that Bind to Neutralizing Antibody B Cell Lineage Members with Functional Improbable Mutations. SSRN Electronic Journal, 0, , .	0.4	1
57	Structure and Fc-Effector Function of Rhesusized Variants of Human Anti-HIV-1 IgG1s. Frontiers in Immunology, 2021, 12, 787603.	4.8	1
58	Different adjuvanted pediatric HIV envelope vaccines induced distinct plasma antibody responses despite similar B cell receptor repertoires in infant rhesus macaques. PLoS ONE, 2021, 16, e0256885.	2.5	1
59	Complementary Roles of Antibody Heavy and Light Chain Somatic Hypermutation in Conferring Breadth and Potency to the HIV-1-Specific CAP256-VRC26 bNAbs Lineage. Journal of Virology, 2022, 96, e0027022.	3.4	1